AMENDMENTS TO THE CLAIMS

Docket No.: 27793-00102USPX

1. (Currently Amended) A pneumatic component comprising:
- having an airtight; elongated hollow body (1) made from flexible material, the hollow body being that is capable of being charged with compressed air;
having at least one compression member (2), extending along a surface line of the hollow body (1) and adjacent thereto for protection that is protected against displacement and bending; also
having at least one pair of tractive elements (4), which are secured at opposite the two ends of the at least one compression member (2), for which purpose wherein the at least one compression member (2) is furnished at opposite both ends thereof with a node (3) for reciprocal, non-positive attachment of the at least one compression member (2) and the at least one pair of the tractive elements (4) and for absorbing bearing forces;
wherein additionally the at least one pair of two tractive elements (4) are arranged so as to wind round the hollow body (1) at least once and in opposite directions and cross each other on the a surface line (7) of the hollow body (1) opposite to the at least one compression member; and (2),
characterised in that
wherein means are integrated via which for electrically altering at least one of the operating parameters pressure in the hollow body (1), length of the compression member (2), or length of the tractive elements (4) may be altered electrically.
2. (Currently Amended) The pneumatic component as cited in claim 1, wherein eharacterised in that means are integrated for electrically altering via which pressure p ₁ in the hollow body (1) can be altered electrically.
3. The pneumatic component as cited in claim 2, <u>further comprising</u> : characterised in that
the hollow body (1) is furnished in the interior thereof with a gas impermeable flexible bladder (12) with a smaller volume than that of the hollow body (1), a gas-impermeable flexible bladder inside the hollow body, the bladder having a smaller volume than the hollow body;
——a container for holding (9) that holds a volatile liquid, the container being (10) is installed inside the bladder; (12),
a heat pump <u>having</u> (13) with reversible heat flow <u>is adapted to heat or cool the volatile liquid;</u>

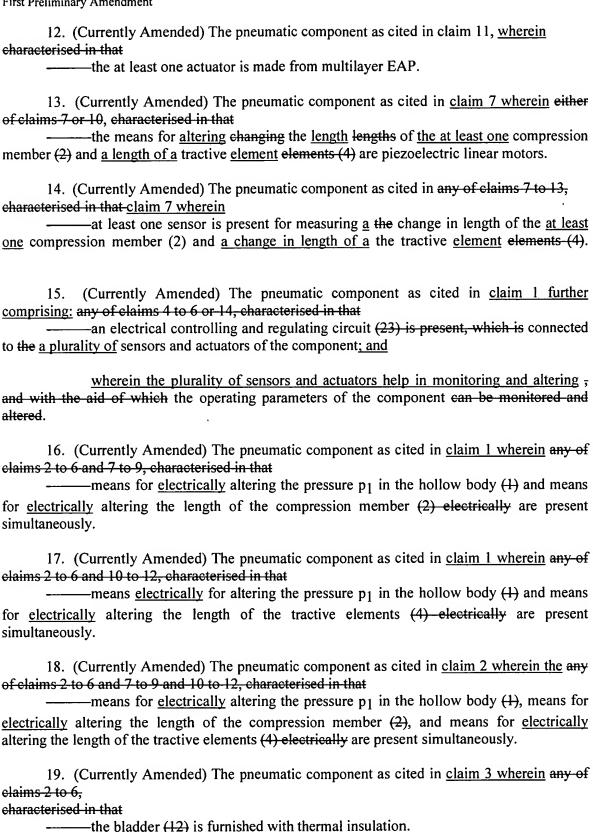
First Preliminary Amendment

direction is present via which the liquid (10) can be heated or cooled and

Docket No.: 27793-00102USPX

direction is present, via which the liquid (10) can be heated or cooled, and wherein one side of the heat pump which is in thermal contact with the liquid (10) and another the other side of the heat pump is adapted to absorb or give off heat externally to the bladder; and which can exchange heat with the exterior outside of the bladder (12). -the wherein a change in pressure can be brought about by electrothermal means with liquid amplification. 4. (Currently Amended) The pneumatic component as cited in claim 3, wherein characterised in that ——at least one electrical gas pressure sensor (14) is located inside the bladder (12). 5. (Currently Amended) The pneumatic component as cited in claim 4, wherein characterised in that the bladder (12) is produced from a flexible, low-expansion material. 6. (Currently Amended) The pneumatic component as cited in claim 4, characterised in that wherein -----the bladder (12) is made from an elastic material. 7. (Currently Amended) The pneumatic component as cited in claim 1, characterised in that wherein ——the at least one compression member (2) contains comprises means for altering the length thereof electrically. 8. (Currently Amended) The pneumatic component as cited in claim 7, wherein characterised in that ——the means for altering the length of the at least one compression member (2) include includes at least one actuator based on electroactive ceramic (EAC). 9. (Currently Amended) The pneumatic component as cited in claim 8, wherein characterised-in that —the at least one EAC actuator comprises used is a stack actuator (17), which is to say several wherein the stack actuator comprises a plurality of the EAC actuators (18) arranged in series. 10. (Currently Amended) The pneumatic component as cited in claim 1, wherein characterised in that —the tractive element comprises (4) contains means for altering the length thereof electrically. 11. (Currently Amended) The pneumatic component as cited in claim 10, wherein characterised in that ———the means for altering the length of the tractive element includes (4) include at least one actuator based on electroactive polymers (EAP).

Docket No.: 27793-00102USPX



Application No. Not Yet Assigned Amendment dated First Preliminary Amendment Docket No.: 27793-00102USPX

20. (Currently Amended) The pneumatic component as cited claim 3 wherein in any of claims 2 to 6,

characterised in that

———the heat pump (13) is a Peltier element.